MISSOURI BOTANICAL GARDEN BULLETIN

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lume XLIV March, 1956 Number 3

COVER: Trail between massive sandstone bluffs at Giant City State Park, Illinois. For this and other photographs we are indebted to J. W. Voigt, Department of Botany, Southern Illinois University, Carbondale, and the Illinois Division of Parks and Memorials, Springfield.

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Missouri Botanical Garden Bulletin

Vol. XLIV MARCH, 1956 No. 3

GIANT CITY STATE PARK IN THE SPRING

ROBERT H. MOHLENBROCK

ALONG about the fourth week in April or the first week in May, the flora of low woodlands in southern Illinois reaches its glorious peak. While the drier oak-hickory forests are just awakening from their winter dormancy with blossoms of the Spiderwort (*Tradescantia virginiana*) and Hound's Tongue (*Cynoglossum virginianum*) and while the arid sandstone bluff tops of the Shawneetown Ridge show only the opening leaf buds of the Black Jack and Post Oaks (*Quercus marilandica* and *Q. stellata*) and Winged Elm (*Ulmus alata*) and the flowers of Yellow Star-grass (*Hypoxis hirsuta*) and False Garlic (*Nothoscordum bivalve*), the moist rich woods of the ravines and valleys have been decking themselves out in their finest spring formals. To capture some of this splendid show of wild flowers, let us take an unhurried walk through such a lush area. As a reminder, let us not pick any of the flowers, for we may want to come back and enjoy the show when it opens again next season.

We are going to walk along part of the "two-mile foot trail" in Giant City State Park. This park lies in the southern part of Jackson County and the northern part of Union County, Illinois, about 110 miles south of St. Louis. We go under an archway formed by massive sandstone bluffs on our right and a large boulder on our left. The boulder, through a long period of weathering and erosion, has broken away from the bluff. During its hundreds of independent years, it has developed on its exposed but shaded portions a carpet of mosses. And from the cracks and crevices of its outer edges is growing a little shrub we know to be Wild Hydrangea (*Hydrangea arborescens*). It is not in flower yet, but we are able to see its clusters of flower buds. After passing the archway, we find ourselves still bounded on our right by the bluff, but to our left is the beginning of the low woods.

The first showy wild flower we see as we look to the left is the yellow Celandine Poppy (*Stylophorum diphyllum*). It is not plentiful, but as we scan the woods occasional glowing patches of yellow stand out. If we walk down a small rocky slope to the valley floor to get a better look at the Poppy, we suddenly find ourselves surrounded by a myriad of white, lavender, and violet blossoms. These turn out to be masses of the very common Spring Beauty (*Claytonia*

Rock Slide along Stonefort Creek, Giant City State Park

virginica), Bloodroot (*Sanguinaria canadensis*), Pepper-root (*Dentaria laciniata*), Missouri Violet (*Viola missouriensis*), Marsh Violet (*Viola papilionacea*), and Woolly Blue Violet (*Viola sororia*).

Now we ascend to the path and on the bluff before us, just out of reach, is a ledge on which grow the drooping-flowered Yellow Dog-tooth Violets. Proceeding toward a grotto on our right, we notice the path has become lined, almost as if planned by man, with a whitish-flowered plant which has leaves that remind us of those of maples. This is the Waterleaf (*Hy-*

drophyllum canadense). We can't resist examining the grotto formed by massive sandstone bluffs on three sides. Back into the extremities of this grotto, a small cave leads into the bluff. Coming from the cave is a stream of cool air which causes the small upright plants on the adjacent cliff to sway calmly back and forth. These plants which have very hairy leaves are as yet not in flower. They belong to a summer-blooming species known as Alum-root (*Heuchera parviflora* var. *rugelii*). At the base of these plants hundreds of tiny and some not so tiny green organisms are plastered up against the cool rocks. These are mosses and their relatives, liverworts. By kneeling and peering under a small overhang of the bluff, we can see one of the larger of these liverworts — a leathery, irregular-shaped plant (*Conocephalum* sp.).

Let us continue along the trail at the base of the bluff. We don't progress far until we come to a large Bitternut Hickory (*Carya cordiformis*) whose base is only about three feet from the path. If we are observant, we notice at the base of the tree an attractive bronze-colored fern. This is the Bronze Grape Fern (*Botrychium dissectum* var. *obliquum*). The forest floor is still covered by Spring Beauties and Violets and a small delicate green fern, the Fragile Fern (*Cystopteris fragilis*). And what is this tiny little black-and-white flower at our feet? It's the Harbinger-of-Spring (*Erigenia bulbosa*)! And a harbinger it is, indeed, for had we come this way the last of February, when everything still seemed sleeping, we could have found this sparkling little plant, often called Salt-and-Pepper, sprinkled throughout protected spots in the woods. Here and there are small white flowers which at a glance appear to be Spring Beauties but closer observation reveals the small three-lobed leaves of the False Rue Anemone (*Isopyrum biternatum*).

The path narrows now, the bluff being our western boundary and the steep slope leading to the valley floor our eastern limit. Growing abundantly on the slope are found two interesting shrubs — the Spice-bush (*Lindera benzoin*) with tiny yellow flowers, and the Bladdernut (*Staphylea trifolia*) with rich creamy flowers. Both these shrubs are also featured later in the season when the Spice-bush presents its aromatic crimson berries and the Bladdernut its curious inflated fruits.

A sharp turn to the right, followed almost immediately by an equally sharp one to the left, brings us to a very productive area of the woods. Here a rivulet flows at right angles to the bluff on our right. Under the bluff, the ground is soggy and densely shaded. It is here that we see an occasional cluster of leaves with a flower stalk arising from the center. This is French's Shooting-star (*Dodecatheon frenchii*), known only in the world from similar darkened areas in a few of the counties of southern Illinois. It was probably from the very spot where we now stand that this little plant became known to science back in 1870.

Let us now leave the path and walk along the rivulet for about twenty

Golden Seal
(*Hydrastis canadensis*)

feet until we come to a large isolated boulder to our left. On and around this boulder is a great variety of spring wild flowers. A patch of hairy heart-shaped leaves lie on the rich leaf mold, and we know that if we carefully lift them and look beneath, we shall see tiny maroon flowers belonging to the Wild Ginger (*Asarum reflexum*). And over here are the Dutchman's-breeches (*Dicentra cucullata*) and the Squirrel Corn (*Dicentra canadensis*). The Dutchman's-breeches are those with the petals pointed and spreading, resembling legs of trousers, while the Squirrel Corn has rounded, "closed" petals. Growing from some of the small crevices in the boulder is a plant we all know as Jack-in-the-Pulpit (*Arisaema triphyllum*). Other plants that attract our attention are the beautiful Yellow Bellwort (*Uvularia grandiflora*), Solomon's-seal (*Smilacina racemosa*), Wild Larkspur (*Delphinium tricorne*), Wild Geranium (*Geranium maculatum*), and Yellow Violet (*Viola eriocarpa*).

We now cross the rivulet and climb the small bank on the other side. We find ourselves in the midst of hundreds of ferns—some large and leathery, others small and more delicate. Among the former are the beautiful Christmas Fern (*Polystichum acrostichoides*) and the Marginal Fern (*Dryopteris marginalis*), while the latter include the Maidenhair Fern (*Adiantum pedatum*) and Fragile Fern (*Cystopteris fragilis*).

While still away from the main path, we walk down the gentle slope toward the large Stonefort Creek. The forest floor is completely covered by vegetation. It is this slope that nature designated for the home of some of the more unusual southern Illinois species. A plant about a foot tall and bearing pale pink flowers is the Pink Valerian

(*Synandra hispidula*)

(*Valeriana pauciflora*). And here are strange-looking plants. At first glance they look like little spikes bearing rather ugly small yellow and brown flowers. But if we look more closely, we are able to discover large leaves lying on the ground which are apparently dying. Although this is spring, the leaves of this species actually are withering. This is the Putty-

root Orchid, and after flowering and fruiting, each plant produces a large, veiny, green leaf in August. This leaf persists throughout the winter but disappears when flowering time comes in the spring.

Yellow Lady's Slipper
(*Cypripedium parviflora*)

If we look about us, we see large drooping white flowers borne from a whorl of three leaflets. This is the grandiose White Trillium (*Trillium gleasoni*). Its smaller maroon-flowered cousin, the Wake Robin (*Trillium recurvatum*), is common here, also.

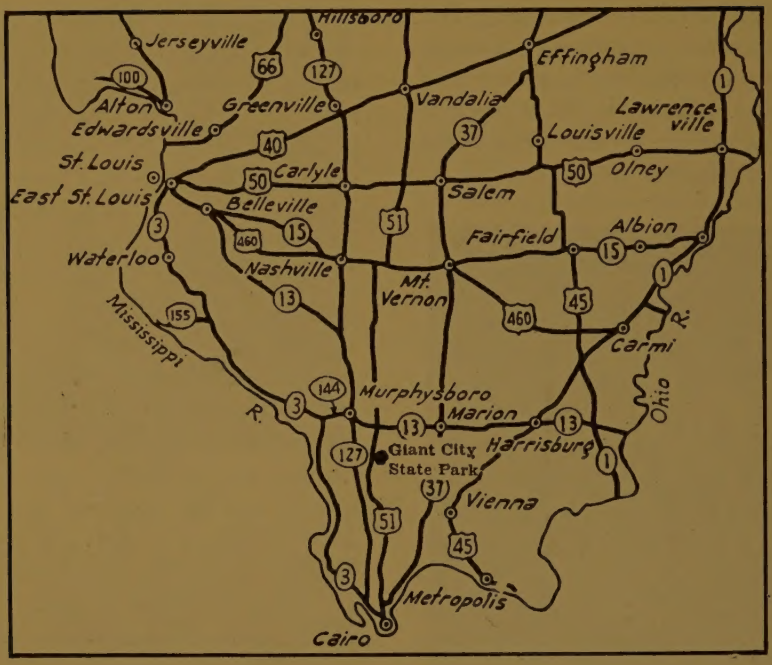
In this area the forest floor is shaded by a number of trees, some of the common ones being the Butternut or White Walnut (*Juglans cinerea*), Hackberry (*Celtis occidentalis*), Sour Gum (*Nyssa sylvatica*) whose leaves turn so crimson in the autumn, Sugar Maple (*Acer saccharum*), and several kinds of Oaks (*Quercus* spp.).

Could we but find the right tree, we would see beneath it, growing on loose sandstone rocks, the curious Walking Fern (*Camptosorus rhizophyllus*). And here are two plants we haven't observed before — one with greenish-yellow flowers, the Blue Cohosh (*Caulophyllum thalictroides*), which later produces blue berries, and a white flowered one, Doll's-eyes (*Actaea alba*), whose glossy white fruits remind one so much of the glassy eyes of a doll.

Where the slope runs into the very bottom of the woods, the ground is misty with pale blue and white blossoms. The plants accounting for this haziness are the White Violet (*Viola striata*) and the two-toned Blue-eyed Mary (*Collinsia verna*). If we are lucky, we may find a few plants of the very rare *Synandra hispidula*. This plant is about fourteen inches tall and bears rich white flowers which may recall the blossoms of the Snapdragon.

So far, we have covered only about one-fourth mile of the foot trail. While

Solomon's Seal
(*Polygonatum canaliculatum*)



Map of southern Illinois showing location of Giant City State Park and some of the various routes by which it may be reached from St. Louis. The quickest is by way of Illinois routes 13 and 51. A more scenic route is via Illinois 3, 144, 13, and 51. This passes through several old German settlements—Columbia, Waterloo, and Redbud—where many of the spick-and-span brick dwellings line the very edge of the sidewalks. Many of these residences feature quaint "old-fashioned" flower beds of mignonette, bleeding-heart, sweet William, and the like. After leaving Chester, the Mississippi River frequently may be seen as it winds its way southward. To the left is probably the most unexplored terrain of southern Illinois—the "Kinkaid Hills", a region of massive sandstone bluffs with numerous moist canyons and occasional waterfalls. Only scattered lonely cabins interrupt the continuity of Mother Nature's handiwork. About 15 miles south of Chester, some 100 yards from the highway, is a small Indian mound, one of the few Indian burial grounds in the southern part of Illinois. After turning onto Route 144, a drive of five miles brings one to the entrance of the new Lake Murphysboro. The water is deep, clear, and well stocked with fish, and the surrounding woodlands are rich in wild flowers. Another pleasant drive is through Missouri on U.S. 61 (not indicated on map), taking the bridge over the Mississippi from Claryville, to Chester, Illinois, and then proceeding to Route 144.

A quiet rocky stream at Giant City State Park.

we have seen many kinds of wild flowers, we would be rewarded further should we continue along the trail, although the number of new wild flowers encountered would become progressively less frequent. Still to be seen are the tiny Bishop's Cap (*Mitella diphylla*) with its petals designed like the most delicate of snowflakes, Wild Phlox (*Phlox divaricata*), Jacob's-ladder (*Polemonium reptans*), and two rare and exciting orchids, the glorious Yellow Lady's-slipper (*Cypripedium parviflorum*) and the mauve and white Showy Orchis (*Orchis spectabilis*) which has the fragrance of the most exotic perfume.

We hope you have enjoyed our little tour. Should you return in the summer or autumn, you would find a great multitude of different species of plants. While the park is relatively small (1523 acres), over 820 species of ferns and flowering plants have been found here. This is approximately one-third the number of species that could be found in the entire state of Illinois.

Should you be interested in further literature dealing with Giant City State Park, two publications in the Illinois Division of Parks and Memorials and State Museum Series are available free at the Giant City lodge. One concerns the geology of the park and is by Carlton Condit. The other, which treats the ferns and flowering plants of the park, was prepared by

Dry sandstone bluffs across from rich moist woods.

the writer. Cabins and camping facilities are available in the park.

To reach the Park from St. Louis, follow Illinois Route 13 from East St. Louis to Carbondale. Then take U.S. Route 51 south about eight miles to the Giant City road which winds for about two miles through beautiful hilly country. Or should you prefer a slightly longer but more scenic journey, follow Illinois Route 3 south to Route 144, then left for 15 miles to Carbondale, and from there south on U.S. 51. The first route is about 105 miles from St. Louis while the latter, which borders the Mississippi for quite a while, covers about 115 miles.

MISSOURI'S CROP OF WILD ANNUALS AND BIENNIALS

JULIAN A. STEYERMARK

THERE is something breath-taking and inspirational in the many forms and colors produced by Nature's parade of flowers, and for many persons the blossoms are the chief or only attraction of a plant. But a true flower-lover wants more than just to see the flower; he wants also to become more intimately acquainted with the earlier stages of growth and leaf-formation preceding flower production. Take, for instance, the wild annuals. In the spring, summer, and fall, they provide masses of striking color on rocky "glades", pastures, meadows, and prairies. In early spring pale blues and lavenders are displayed by the bluets (*Houstonia minima and H. patens*), whites by sandwort, *Arrenaria patula*), Leavenworthia (*Leavenworthia uniflora*), vernal Whitlow grass (*Draba verna*); yellows by Nuttall's stonecrop (*Sedum Nuttallianum*) and selenia (*Selenia aurea*). In the summer and fall centaury (*Centaurium texense*) and palafoxia (*Palafoxia callosa*) impart pink and rosy hues to the landscape, while white is provided by heliotrope (*Heliotropium tenellum*). The mass effect of the colors attracts our attention immediately. After the plant flowers, however, interest in it wanes and few have much interest in what happens next.

Yet, if we happen to be tramping around the limestone "bald knobs" or "glades" of southwestern Missouri in October and November, it may surprise us to learn that what appears to be a bare, drab, rocky soil surface is actually teeming with living plants. Look down closely and you may see infinitesimal bits of gray-green hugging the ground. What are they? They are the tiny young plants of various autumn annuals. Short, thread-like leaves, so characteristic of the adult sandwort (*Arenaria patula*), are already developed and large enough to be seen on the seedlings ready to take the winter. Near by are the young plants of widow's cross (*Sedum pulchellum*) with broad, spoon-shaped, gray-green leaves appearing as tiny flat rosettes.

They, and the clan of annuals to which they belong, signal to us that "spring is just around the corner". They are "all set to go", come winter, and are waiting for the first touch of spring to continue their growth. They are winter annuals that will survive the cold wintry blasts. The seeds they produced in quantity fell to the ground or were scattered by the wind, and lay dormant to "season" for a few months. Following late summer or autumnal rains, the tiny seeds germinated. In the fall-flowering annuals such as *Palafoxia callosa*, the pink-flowered member of the Composite Family found on the limestone "glades" of southwestern Missouri, germination of the seeds is delayed until the following spring. But those which normally flower in the spring germinate their seeds in the fall, and

the young plants remain over the winter in a reduced state of development ready to continue their growth the following spring.

If we look carefully now at the leaf mould covering the ground in the wooded valleys, we may be fortunate enough to see the little seedlings of the blue-eyed Mary (*Collinsia verna*) already showing the adult type of short broad leaves with little notches on their margins, or the young stems of cleavers or bedstraw (*Galium Aparine*) with the broad "seed leaves" followed by light green leaves arranged in tiers, one above the other.

These *annuals* all have *one* feature in common: *they germinate, flower, produce seed, and germinate again, all within the period of one year.* The true *biennials require two years to produce flowers*: During the *first year* a *rosette of leaves* is produced; during the *second year* the *flowers and seeds.* Two good examples of native biennials of Missouri are the rose gentian (*Sabatia angularis*) and Indian paint brush (*Castilleja coccinea*). The first year the rose gentian is only a rosette of two to four pairs of smooth, pale green, rounded leaves closely hugging the surface of the soil. This rosette gives rise during the following summer to a branching leafy stem bearing fragrant pink or white showy flowers. The first year Indian paint brush consists of a rosette of several, narrow, irregularly toothed, yellow-green leaves lying close to the ground. The second year an erect leafy stem rises from this rosette, bearing at its summit a cluster of scarlet or yellow bracts enclosing yellow flowers.

ROSE PINK (*Sabatia angularis*)

NOTES ON SNOWDROPS

F. G. MEYER

Flowers of white, on slender scapes, poised like elfin insects in arrested flight—these are the snowdrops, harbingers of spring and first hardy bulbs to flower. While it was easy to coin the name "Snowdrop" to characterize these flowers, it seems more difficult to call them "Bulbous Violets" as did John Gerarde in his great herbal of 1636.

About a dozen species of the genus Galanthus (the botanical name for Snowdrops) are natives of the Old World, from the Alps to Asia Minor where the greatest concentration of species occurs, in Greece, its islands, and Turkey. But only two are really well known in American gardens. The Alpine Snowdrop (*Galanthus nivalis*) of the Alps has long been cultivated and still is the best known. Its green-tipped variety, var. *scharlokii,* is a bizarre form well worth growing. The Elwes Snowdrop (*Galanthus elwesi*), from Turkey, probably is the second best-known Snowdrop in America.

Snowdrops are bulbous plants in the Amaryllis family, which includes the daffodil, snowflake, onion, and amaryllis. Actually, the structure of the snowdrop flower most closely resembles the daffodil. On the other hand, the flowers of the snowdrop, which hang like crystal pendants at the summit of slender green scapes between the two subtending leaves, could hardly be confused with any other plant in the Amaryllis family. The tallest species are not more than six to eight inches in height. In growth habit snowdrops are gregarious like the narcissus. The Snowflake (Leucojum) is most often confused with the Snowdrop, no doubt on account of the similar common names.

Cultivation.—Snowdrops may easily be grown in St. Louis. They are a delight to have, because no other bulbous plant flowers so early. *Galanthus elwesii* and *G. byzantinus* are the first to come into flower, and the last one of the season is the Alpine Snowdrop (*G. nivalis*). It is possible to have a continuous show of snowdrops from the first of January until almost the middle of March. This year, a few flowers of *Galanthus elwesii* were out in the Mausoleum the first of January.

Snowdrops are woodland plants preferring well-drained soil high in organic matter. They are most effectively planted in masses along a brick-lined walk, at the edge of a shrub border, or in clumps with tree trunks as a bold background. Well-established plantings left undisturbed for years will naturalize freely from seed and bulblets. The most effective snowdrop plantings at the Garden are massive clumps framed against the ivy ground-cover in the Mausoleum. Some of these plantings are at least twenty-five years old. Regarding depth of planting, from two to six inches seems to suit them best. In a warm soil high in organic matter, bulbs planted two inches deep will flower the earliest.

BYZANTINE SNOWDROP (*Galanthus byzantinus*)

An occasional transplanting may be necessary whenever flowering seems to lag; however, fertilizing snowdrops with bone meal, at the rate of three pounds per hundred square feet, should keep these plants multiplying and flowering profusely over many years.

Transplanting snowdrop bulbs should be done preferably while they are in flower. They just can't stand drying out. Failure is almost always due to dried out bulbs that were dead when bought. Of the two sorts commonly offered by dealers, *Galanthus nivalis* suffers more. Imported Dutch bulbs of *G. elwesii* planted in late October came through nearly 100 per cent. Snowdrops and the closely related Spring Snowflake (*Leucojum vernum*) do not have thick protective bulb coats to prevent desiccation. More of these bulbs would be grown if transplanting in spring was more fully appreciated.

Elwes Snowdrop (*Galanthus elwesii*) is a native of western Turkey and one of the most variable in the genus. A number of garden forms and hybrids of this species have confused specialists for a long time. At least three forms are growing in the Mausoleum. An outstanding form has narrow, blue-green, more or less pleated leaves less than a half-inch wide, and flowers with the outer segments oblong and pointed. When full-blown, the blooms emit a delicate perfume very attractive to bees. The more common garden variety offered by Dutch bulb merchants has wider flat leaves covered by whitish bloom, with the outer flower segments less pointed and more deeply cup-shaped. Normally, a few flowers of this species are in bloom by the first of February. This year a few were out the first of January.

The Byzantine Snowdrop (*Galanthus byzantinus*) is a reputed hybrid which was introduced into cultivation from Turkey at the end of the last century. This is one of the earliest species to flower but is rarely seen in American gardens. The plant illustrated was grown from bulbs sent a few years ago from Dr. H. F. Dovaston at the Agricultural College at Ayr, Scotland. This has long been considered one of the choicest species, and it is hoped our introductions may bear out earlier appraisals.

EXPLANATION OF ILLUSTRATION OF *GALANTHUS BYZANTINUS*

Fig. 1. Stamen. × 2½.
Fig. 2. Habit of plant. Outer three flower segments (sepals) white, inner three segments corona-like, with a patch of green at the base and two spots at notch at summit. About natural size.
Fig. 3. Flower, face view. About natural size.
Fig. 4. Outer and inner view of petals—stippled areas green. × 2½.
Fig. 5. Flower components: stamens and flower segments (sepal and petal) in perspective. About natural size.

SOME FACTS ABOUT SHAW'S GARDEN

The Missouri Botanical Garden (the official name chosen by Mr. Shaw) carries on the garden established by Henry Shaw over a century ago at TOWER GROVE, his country home. It is a private institution and has no support from city or state. The old stone walls and cast-iron fences, the Linnaean House, the Museum, the Mausoleum, and the TOWER GROVE mansion all date from Mr. Shaw's time. Since his death, as directed in his will, the Garden has been in the hands of a Board of Trustees who appoint the Director.

The Garden is open every day in the year (except New Year's and Christmas) from nine A.M. until seven P.M. (April to November) and until six (November to April) though the greenhouses close at five. TOWER GROVE, itself, Mr. Shaw's old country home, is open from one until four. The Garden is nearly a mile long and has several entrances. The main Entrance, the one used by the general public, is at Tower Grove and Flora Place on the Sarah bus line (No. 42). The Park Southampton buses (No. 80), direct from downtown, pass within three blocks of this entrance and stop directly across the street from the Administration Building at 2315 Tower Grove Avenue. The latter is the best entrance for students, visiting scientists, etc. It is open to such visitors after 8:30 a.m., but is closed on Saturdays, Sundays, and holidays. There is a service entrance on Alfred Avenue, one block south of Shaw Avenue.

Since Mr. Shaw's time an Arboretum has been developed at Gray Summit, Mo., adjacent to State Highways 50 and 66. It is open every day in the year and has two miles of auto roads as well as foot trails through the wild-flower reservation. There is a pinetum and an extensive display of daffodils and other narcissi from March to early May.

Weeds. by W. C. Muenscher. 560 pages. The Macmillan Co. New York, 1955. Price $10.00.

If your back is sore, your knees stiff and your hands blistered from digging and pulling; if you think weeds are overwhelming you, it's time to stop and look into the new edition of this intriguing book first published twenty years ago. Dr. Muenscher is the country's foremost authority on weeds and his career has been devoted to studying and teaching about these aggressive plants. He writes so much of interest that I am tempted to subtitle the book — How to make Friends with the Weeds. The bulk of the volume concerns the identification and description of some 571 kinds of plants, often objectionable, which occur in the northern United States. What to do about them is not a purpose of this book although references are given to sources of such information as their chemical control. Advice on this topic is alas, mainly, dig, hoe and grub. There are 135 fine illustrations to help in recognition and accounts of their origins, life histories and cunning methods of dispersal supply clues for eradication. Several of the commonest as the Mustards, Docks, and Purslane are edible. Some are medicinal plants as the lovely Foxglove, the Wild Cranesbill, pesky relative of the Geranium, and that plague of the lawn, American Pennyroyal. About the very poisonous Jimson-weed common in barnyards, one wonders who tells the little pigs not to eat it. Many of those included might be welcomed into St. Louis gardens, among them Hay-scented Fern, Cinnamon Fern, Day Lily, Mountain Laurel, Spearmint and Horehound. Perhaps one might select some of these, relax and grow weeds. There is much to be learned about how and why plants are spread. The weeds have much to tell.

ALICE F. TRYON

WHAT MAKES A GARDEN
A TOUR FOR THE BENEFIT OF THE MISSOURI BOTANICAL GARDEN

The Garden Club of St. Louis invites you to visit the following ten outstanding gardens:

The Dates— Friday, April 27
Saturday, April 28
Sunday, April 29
The Hours— 10:30 A.M. to 5:30 P.M.
Admission— $2.00, tax included.
Tickets— On sale at all of the gardens on the tour, at the Missouri Botanical Garden, and by mail. Send check to Mr. William Weld, 9936 Litzsinger Road, St. Louis, 17.

GARDENS TO BE SHOWN ON THE TOUR

1. Mr. and Mrs. Warren Chandler
6357 Ellenwood Avenue
A terrace and green garden designed by Peter Seltzer, a wonderful old gentleman who was over eighty years old when he designed and built this garden. The garden accents Italian

ornaments, yew hedges, brick walls, and *privacy* — a peaceful garden, lived in, worked in, and loved by its owners.

2. Mr. and Mrs. Arthur Hoskins

   6416 Cecil Avenue

   Handsome clipped ivy columns on front of this brick Georgian town house. A curving walk leads to enclosed brick and wrought-iron terrace. A flourishing pair of *Magnolia grandiflora* accents the perennial garden. Tool storage and work space in a shuttered area. Display of new and useful tools will be in the Georgian garage.

3. Mr. and Mrs. Meredith Jones

   6419 Ellenwood Avenue

   The brick terraced garden adjoining the house was designed by the late Peter Seltzer, an outstanding garden architect of St. Louis. The outer garden, *new this year*, was designed and planted by Eleanor McClure. Both gardens feature statues by Wheeler Williams; dogwood, azaleas, and rhododendrons.

4. Mr. and Mrs. Ralph Bixby

   8930 Ladue Road

   A hundred-foot lot which was considered worthless has developed into an interesting Spring garden.

5. Mrs. Robert Corley

   13 Upper Ladue Road

   The development of a sloping property, done little by little, has resulted in a particularly successful formal garden, below the house. This, because of its design, is pleasing to the eye both winter and summer. The greenhouse and the potting house, designed by Eloise Polk, are a feature of the formal garden. Adjacent to the open fireplace area will be a display of furnishings for outdoor entertaining.

6. Mr. and Mrs. B. B. Culver, Jr.

   330 N. Warson Road

   The garden area is in three levels — the upper and lower terraces were designed by Edith Mason. An exceptionally fine lawn is surrounded by a brick wall backed by white pines. A meadow bordered by a creek edged with naturalized spring bulbs is one of the many interesting features. Most beautiful planting of flowering trees and shrubs. The studio will house a collection of old prints and garden books on exhibit and for sale.

7. Dr. Ben Charles

   2 Fielding Road

   House and garden open. An 1875 farm house, remodeled by Beverly Nelson, has interesting living-room completely lined with books, many fine antiques including large portrait of Dr. Charles' great grandmother. Hedged formal garden leads to swimming pool off terrace.

8. Mr. and Mrs. Henry Hitchcock

   Woods Mill Road

   Chesterfield, Missouri

   An extensive estate landscaped by Mr. Charles Gillette of Virginia. The grass lawn in front commands an extensive view. The many gardens have not been watered through the drought years. A large circular perennial garden is connected to the terrace by an alley of magnolias. A twelve-foot holly hedge adjoins the garage where there will be an instructive display of garden sprays.

9. Mr. and Mrs. Leicester Faust

   Thornhill Farms

   Chesterfield, Missouri

   An estate overlooking the Missouri River — truly old world and full of charm. Old evergreen plantings—a natural wild flower garden never pastured or planted. Informal perennial flower gardens. Two tropical greenhouses. Famous statues of the "Rising and Setting Sun" by Weinmann on a grass terrace overlooking the river. Orchid plants will be offered for sale. (Barbecue sandwiches and coffee will be on sale here on Saturday, April 28, and Sunday, April 29.)

10. Mr. and Mrs. Warren Shapleigh

    R. R. 13, Mason Road

    A small prefabricated country house surrounded by three gardens. These were built and maintained by the owners. Eight years ago this land was a bare, eroded pasture, devoid of topsoil. Of particular note is the multiflora rose hedge, which surrounds the present pasture.

THE MISSOURI BOTANICAL GARDEN

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A Walking Fern, one of the interesting native plants found growing at Giant City State Park, in southern Illinois, a pleasant place for a day's outing. (See Bob Mohlenbrock's article on pages 33-40 of this BULLETIN.) It is called Walking Fern because the fronds root at the tip, forming eventually an entire little plant with further fronds which reach out and start new plants in turn. A single plant may, in this fashion, form a green mat all over the face of the boulder.